

WHAT IS CLAIMED IS

5 *sub B1* 1. A design data processing method of  
processing hierarchically configured design data,  
comprising the steps of:  
a) obtaining first design data of a  
10 predetermined rank of hierarchy;  
b) obtaining second design data of a rank  
of hierarchy higher than the predetermined rank of  
hierarchy; and  
c) combining the second design data to the  
15 first design data.

20 2. A design data processing method of  
processing design data configured of a plurality of  
blocks, comprising the steps of:  
a) obtaining first design data of a block  
of the plurality of block of a predetermined rank of  
25 hierarchy;  
b) obtaining second design data of a rank  
of hierarchy lower than the predetermined rank of  
hierarchy; and  
c) displaying a peripheral portion of the  
30 block of the second design data, and setting the  
peripheral portion to a wiring inhibition region.

35 3. A design data processing method of  
processing design data of wiring, comprising the

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step of producing the design data such that a metal density of the wiring is not more than a predetermined value, said step comprising the step of using design data in which a wire is previously  
5 split into a plurality of wires so that the metal density is not more than the predetermined value.

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4. A design data processing method of processing design data in which a layout is made as a result of blocks are combined, comprising the  
15 following steps of:

- a) referring to a block layout of a predetermined block of a rank of hierarchy lower than a rank of hierarchy including said predetermined block;
- 20 b) detecting a region in which no block is disposed yet from the block layout of the lower rank referred to in the step a); and
- c) setting the not-yet-disposed region detected in the step b) to such a region that  
25 another block can be disposed there.

30 *sub B2* 5. A computer readable recording medium storing a software program for processing hierarchically configured design data and causing a computer to execute the following steps of:

- a) obtaining first design data of a  
35 predetermined rank of hierarchy;
- b) obtaining second design data of a rank of hierarchy higher than the predetermined rank of

Sub B2  
Contd

hierarchy; and

c) combining the second design data to the first design data.

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6. A computer readable recording medium storing a software program for processing design data configured of a plurality of blocks and causing a computer to execute the following steps of:

a) obtaining first design data of a block of the plurality of block of a predetermined rank of hierarchy;

b) obtaining second design data of a rank of hierarchy lower than the predetermined rank of hierarchy; and

c) displaying a peripheral portion of the block of the second design data, and setting the peripheral portion to a wiring inhibition region.

7. A computer readable recording medium storing a software program for processing design data of wiring and causing a computer to execute the step of producing the design data such that a metal density of the wiring is not more than a predetermined value, said step comprising the step of using design data in which a wire is previously split into a plurality of wires so that the metal density is not more than the predetermined value.

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5 following steps of:

10                   b) detecting a region in which no block is  
disposed yet from the block layout of the lower rank  
referred to in the step a); and

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